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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/712,890

11/12/2003

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43314/270282

9642

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7590

03/22/2007

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EXAMINER

NGUYEN, PHILLIP H

ART UNIT

PAPER NUMBER

2191

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/712,890	ADDINGTON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Phillip H. Nguyen	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20050616, 20050707, 20050720.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is in response to the original filing of November 12, 2003. Claims 1-58 are pending and have been considered below.

#### ***Note***

2. Regarding claims 14, 49, 52, and 54, recite the phrase "for" or "capable of". They indicate intended use and as such do not carry patentable weight. The limitations following the phrase "for" or "capable of" describe only intended use but not necessarily required any functionality of the claims. Applicant is required to amend the claims so that the claim limitations are recited in a definite form. For example, claim 49 recites "capable of transmitting" should be changed to "transmits" or "to transmit" or "that transmits".

#### ***Specification***

3. The incorporation of essential material in the specification by reference to the publications (U.S. Provisional Application No. 60/480,391 filed on June 20, 2003 and U.S. Provisional Application No. 60/511,398 filed on October 15, 2003) is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating

that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 47 recites the limitation "storing the configuration message" in referred to parent claim 41. There is insufficient antecedent basis for this limitation in the claim. There is no storing step performed in claim 41. Applicant is required to correct the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 49 and 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Hellerstein et al. (United States Patent No.: US 7,013,461 B2).

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As per claim 49:

Hellerstein discloses a system for downloading host software file to a database, comprising:

- a data processing system capable of transmitting a host software file comprising a database capable of receiving and storing the host software file and maintaining an association of the host software file with a host manufacturer ("**Service Distribution Server SDS 205**" FIG. 2), the host software file further associated with a specific host model of the host manufacturer ("**software package and its description**" col. 7, line 59-60), the database capable of storing a certification file associated with the host software file ("**Global Software Repository 206**" FIG. 2), the database associating the host software file with an enhanced services system ("**extracts the package from the global repository and distributes the package to the region**" col. 11, line 1-3); and a communications network, operatively connected to the data processing system, capable of receiving the host software file from the data processing system and transferring the host software file to the enhanced services system ("**a communication network to form the distributed computing environment**" col. 11, line 57-58).

As per claim 50:

Hellerstein discloses the system as in claim 49 above; and further discloses:

- wherein the communications network comprises the Internet ("**the communication network may be public (e.g., Internet)**") col. 11, line 58).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-36 and 41-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hellerstein et al. (US 7,013,461 B2).

As per claim 1:

Hellerstein discloses a method for distributing software comprising:

- producing a host software file by a host software manufacturer ("**creating software package for distribution**" see FIG. 2);
- providing the host software file from the host software manufacture to a certification entity ("**obtain new package**" col. 9, line 8; "**introduce new software package (SP) and its description (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list) is entered in the Service Distribution Server or SDS 205**" col. 7, line 59-63; **SDS 205 is certification entity**);

- certifying the host software file for operation in a host (**software package itself can be considered as a certification or its description can also be considered as a certification for operation in a target machine**);
- establishing a first connection from a data processing system to a host file database ("**package is stored in the global software repository 206**" col. 9, line 41-42; **connection must be established before in order to store the package; also see FIG. 2**);
- transferring the host software file from the data processing system to the host file database ("**package is stored in the global software repository 206**" col. 9, line 41-42);
- receiving confirmation of receipt of the host software file from the host file database ("**Exit algorithm. Exit from algorithm with proper exit code**" col. 9, line 43);
- identifying an enhance service system to receive the host software file ("**determine which regions qualify as targets for software distribution**" col. 10, line 33-34);
- establishing a second connection from the host file database to the enhanced services system (**connection between SDS and Region must be established in order to transfer package. Also see FIG. 2**); and
- transferring the host software file from the host file database to the enhanced service system ("**extracts the package from the global software repository and distributes the package to the region**" col. 11, line 1-3).

Hellerstein does not explicitly disclose:

- testing the operation of the host software file by the certification entity .

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that software package must be tested either at SDS 205 or where the software package created to ensure the operation at specific target machine before distributing. One of ordinary skill in the art would have been motivated to perform testing software package at the SDS 205 before distributed to region server for target machine to ensure that there is no defects are presented in software package before released it.

As per claim 2:

Hellerstein discloses the method as in claim 1 above; and further discloses:

- wherein certifying the host software file for operation in a host comprises certifying the host software file for execution on a host associated with a specific host manufacturer and a model associated with the specific host manufacturer ("**determine if each of the end point machines (the potential targets) has an appropriate amount of resources (CPU, RAM, disk space, swap space, etc.). Determine if a target 202 has an appropriate version of the correct operating system, pre-requisites (i.e., are the required services present)**" col. 8, line 32-39; it certifies the software package for executing on a specific target machine 202 by making sure that the target machine 202 has a correct operating system and an



**appropriate amount of resources (each machine model has different amount of resources)).**

As per claim 3:

Hellerstein discloses the method as in claim 1 above; and further discloses:

- wherein the data processing system is operated by the certification entity or the host software manufacturer ("**Service Distribution Server (SDS) 205**" col. 7, line 62; **SDS 205 can be a data processing system or a data processing system is built in SDS 205**).

As per claim 4:

Hellerstein discloses the method as in claim 1 above; and further discloses:

- wherein the host software includes at least one of a host protocol file, host data file, host profile file, service data file, or host configuration message set file ("**description file (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list)**" col. 7, line 60-62; **this file can be a host profile file**).

As per claim 5:

Hellerstein discloses the method as in claim 4 above; and further discloses:

- wherein the host data file contains software objects for execution in the host ("**a software package 201 is a unit of physical containment for a**

**collection of software components forming a service or an end-user application"** col. 4, line 32-34).

As per claim 6:

Hellerstein discloses the method as in claim 4 above; and further discloses:

- wherein the host profile file indicates one of a plurality of resources incorporated in the host ("**resources (CPU, RAM, disk, ...)**" col. 8, line 33-34), wherein at least one of the resources processes digital video signals (**one of ordinary skill in the art would recognize that CPU can process digital video signals**).

As per claim 7:

Hellerstein discloses the method as in claim 6 above, but does not explicitly disclose:

- wherein the host profile file is used to create a user-interface in a configuration message set creation system that determines at least one host configuration message.

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Hellerstein's method to create an user-interface based on the description file. One of ordinary skill in the art would have been motivated to create a user interface based on the description file because it would allow

the user/administrator to select the services, resources, and version, the software package is required for specific target machine.

As per claim 8:

Hellerstein discloses the method as in claim 1 above, but does not explicitly disclose:

- authenticating the data processing system to the host file database prior to transferring the host software file.

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that authenticating the SDS 205 must existed in Hellerstein's approach. One of ordinary skill in the art would have been motivated to include authenticating step while connecting to the database to ensure that SDS 205 is the right SDS 205 in order to protect the database from accessing or writing to it.

As per claim 9:

Hellerstein discloses the method as in claim 7 above, but does not explicitly disclose:

- authenticating the host file data base to the enhanced services system prior to transferring the host software to the host file database.

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that when SDS 205 establishes a

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connection to the database in global software repository, it must check to make sure it connection to the right database. Therefore, one of ordinary skill in the art would have been motivated to perform this step because it ensures the right database gets connected.

As per claim 10:

Hellerstein discloses the method as in claim 1 above, but does not explicitly disclose:

- recording an indication in the host file database of the transfer of the host software file to the enhanced services system.

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that at the end of every transaction, there should be a confirmation to indicate whether a successful or failure transaction.

Therefore, one of ordinary skill in the art would have been motivated to modify Hellerstein's approach to record the transaction indication of region server 203 of successfully received new software package from SDS 205 to ensure that the new software package is successfully received.

As per claim 11:

Hellerstein discloses the method as in claim 9 above; and further discloses:

- recording a second indication in the host file database of the receipt of the host software file from the data processing system ("**determine if software**

**package is already present in the global software repository. That is, the system checks whether this is a new package" col. 9, line 21-23; Therefore, the software package itself is an indication or it must stored an indication in the global software repository to indicate that the software package is already presented in database in order to check for a new arrival of software package).**

As per claim 12:

Hellerstein discloses the method as in claim 1 above; and further discloses:

- maintaining an enhanced services system communication file ("**an enterprise service repository 208**" col. 6, line 29) comprising an address associated with the enhanced services system ("**contains for every region: (i) the services a region provides: determined by querying, for every service, whether an appropriate server is located within the region**" col. 6, line 30-32, **it maintains the location (address) of the region in order to perform the query**), communication parameters for use in transferring the host software file to the enhanced services system ("**client software can only be installed if appropriate server is available (determine from enterprise service repository 208)**" col. 6, line 59-61), and authentication data associated with the enhanced services system ("**the services that are available in a region**" col. 6, line 32-33).

As per claim 13:

Hellerstein discloses the method as in claim 12 above; and further discloses:

- wherein the step of establishing a second connection from the host file database to the enhanced services system comprises establishing a second connection from the host file database to the enhanced services system using the communication parameters maintained in the communication file. (**"client software can only be installed if appropriate server is available (determine from enterprise service repository 208)"** col. 6, line 59-61, **it determines by querying the database using the parameters it maintains**).

As per claim 14:

Hellerstein disclose a method of downloading software, comprising:

- producing host software by a host software manufacturer to control a host (**"creating software package for distribution"** see FIG. 2);
- providing the host software to a certification entity (**"obtain new package"** col. 9, line 8; **"introduce new software package (SP) and its description (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list) is entered in the Service Distribution Server or SDS 205"** col. 7, line 59-63; **SDS 205 is certification entity**);
- receiving a certification indication from the certification entity indicating the host software is compatible with the host (**"read package description...Each**

- package is assumed to be accompanied by information listing the service, software and hardware dependencies of the package. This information is read by the SDS 205" col. 9, line 32; service, software and hardware dependencies of the package tell Service Distribution Server 205 which target machine 202 is the software package can be operated on);**
- **establishing a connection from a first data processing system to a second data processing system, the second data processing system comprising a database for storing host software to be downloaded to a host ("software package is stored in the global software repository 206" col. 9, line 41-42, a connection must be established between the SDS 205 and the global software repository 206 in order to transfer the package; also see FIG. 2);**
  - **transferring a copy of the host software comprising an host protocol file and a host profile file to the second data processing system ("software package is stored in the global software repository 206" col. 9, line 41-42); and**
  - **receiving a confirmation indication from the second data processing system of the receipt of the host software ("Exit algorithm. Exit from algorithm with proper exit code" col. 9, line 43, the exit code indicates the successfully of storing software package into database).**

Hellerstein does not explicitly disclose:

- authenticating the first data processing system to the second the data processing system.

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that authenticating the SDS 205 must existed in Hellerstein's approach. One of ordinary skill in the art would have been motivated to perform authenticating step while connecting to the database to ensure that SDS 205 is the right SDS 205 in order to protect the database from accessing or writing to it by unknown entities.

As per claim 15:

Hellerstein discloses the method as in claim 14 above; and further discloses:

- wherein the host protocol file comprises at least one host specific protocol message used by an enhanced services server to interact with the host  
**("message content may include: service name, package name, "override" flag, package binary" col. 8, line 28-29).**

As per claim 16:

Hellerstein discloses the method as in claim 14 above; and further discloses:

- wherein the host profile file indicates a host type comprising a specific host manufacturer and a model associated with the specific host manufacturer  
**("description file (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list)" col. 7, line 60-62; this file can**



**be a host profile file; “resources (CPU, RAM, disk, ...” col. 8, line 33-34, each machine model has different amount of resources).**

As per claim 17:

Hellerstein discloses the method as in claim 14 above; and further discloses:

- wherein the host protocol file contains a version number associated with the host protocol file (“**description file (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list)**” col. 7, line 60-62, **this file can be a host protocol file**).

As per claim 18:

Hellerstein discloses the method as in claim 14 above; and further discloses:

- wherein the certification indication includes an identification associated with the host, the identification further associated with a specific host manufacturer and a model of the specific host manufacturer (“**determine if each of the end point machines (the potential targets) has an appropriate amount of resources (CPU, RAM, disk space, swap space, etc.). Determine if a target 202 has an appropriate version of the correct operating system, pre-requisites (i.e., are the required services present)**” col. 8, line 32-39; it **certifies the software package for executing on a specific target machine 202 by making sure that the target machine 202 has a correct**

**operating system and an appropriate amount of resources (each model has different amount of resources)).**

As per claim 19:

Hellerstein discloses the method as in claim 14 above, but does not explicitly disclose:

- wherein the host file database records the certification indication ("**read package description...Each package is assumed to be accompanied by information listing the service, software and hardware dependencies of the package. This information is read by the SDS 205**" col. 9, line 32; **service, software and hardware dependencies of the package tell Service Distribution Server 205 which target machine 202 is the software package can be operated on and stored in the global repository**), and the confirmation indication ("**exit code**" col. 9, line 44, **this code must be stored in a database in order to ensure proper exit**).

Hellerstein does not explicitly disclose:

- wherein the host file database records a date and time of receipt of the host software.

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that date and time of receipt the software package must be recorded in the database. One of ordinary skill in the art would have been motivated to record date and time for every software package stored in the

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database because it would help when determine whether the software package is a new software package or old one.

As per claim 20:

Hellerstein discloses the method as in claim 14 above; and further discloses:

- where the host software file contains software objects capable of being executed in a consumer electronics host (**"a software package 201 is a unit of physical containment for a collection of software components forming a service or an end-user application"** col. 4, line 32-34) wherein the consumer electronics host processes digital multi-media signals (**one of ordinary skill in the art would recognize that CPU is cable of processes digital multi-media signals**).

As per claim 21:

Hellerstein discloses the method as in claim 14 above; and further discloses:

- identifying an enhanced services system to receive the host software (**"determine which regions qualify as targets for software distribution"** col. 10, line 33-34);
- establishing a connection from the second data processing system to the enhanced services system (**connection between SDS and Region must be established in order to transfer package. Also see FIG. 2**); and

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- transferring the host software to the enhanced services system ("**extracts the package from the global software repository and distributes the package to the region**" col. 11, line 1-3).

As per claim 22:

Hellerstein discloses the method as in claim 21 above; and further discloses:

- where the step of transferring the host software to the enhanced services system further includes transferring a copy of the certification indication (**when SDS 205 transfers software package to the region, it also include in the software package the certification indication in order for the region to determine which target machines have an appropriate resource required by software package**).

As per claim 23:

Hellerstein discloses a method of downloading software, comprising:

- receiving a host software file at a host file database, the host software file for configuring a host ("**extracts the package from the global software repository and distributes the package to the region**" col. 11, line 1-3);
- maintaining a first list of at least one enhanced services system, the enhanced services system further associated with a destination address and the host software file ("**determine all the region servers 203 whose services profiles match the service that is going to be provided by the**

- new package**” col. 8, line 10-12, **it must maintains a list of region servers 203 in order to determine which one is qualified for software package**);
- maintaining a second list of the destination address associated with a set of communication parameters (**“an enterprise service repository 208”** col. 6, line 29; **“contains for every region: (i) the services a region provides: determined by querying, for every service, whether an appropriate server is located within the region”** col. 6, line 30-32, **it maintains the location (address) of the region in order to perform the query**), the set of communication parameters including authentication information (**“client software can only be installed if appropriate server is available (determine from enterprise service repository 208)”** col. 6, line 59-61);
  - establishing a communications path between the host file database and the enhanced services system, the communications path using the destination address (**“Software distribution from SDS 205 to region server 203”** col. 8, line 20-21, **a connection must be established using the destination address in order to distribute software**; also see FIG. 2);
  - transmitting the host software file from the host file database to the enhanced services system (**“Software distribution from SDS 205 to region server 203”** col. 8, line 20-21); and
  - recording an indication of the confirmation of the receipt of the host software file, the indication recorded in the host file database (**“determine if software package is already present in the global software repository. That is,**

**the system checks whether this is a new package" col. 9, line 21-23;**

**Therefore, the software package itself is an indication or it must stored  
an indication in the global software repository to indicate that the  
software package is already presented in the database in order to check  
for a new arrival of software package).**

Hellerstein does not explicitly disclose:

- authenticating the host file database to the enhanced services system using  
in part the set of communications parameters;
- receiving a confirmation of the receipt of the host software file from the  
enhanced services system; and

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that when SDS 205 establishes a connection to the database in global software repository, it must perform a verifying step to make sure it connects to the right database. After that the transferring step is performed. It also obvious to one of ordinary skill in the art to recognize that a confirmation of the receipt of the software package from the region must also be performed in order for the SDS 205 to know the software package is successfully transferred. Therefore, one of ordinary skill in the art would have been motivated to performed authentication and confirmation step in order to protect database from unknown entities and indicate the software package is successfully transmitted.

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As per claim 24:

Hellerstein discloses the method as in claim 23 above; and further discloses:

- storing the host software file in a second database located at the enhanced services system ("**a role repository 204**" col. 8, line 46; maintains information such as "**service, role, associated software package(s), and updatable flag**" col. 8, line 50-51);
- transmitting a copy of the host software stored in the second database to a host ("**software distribution from RS 203 to target 202**" col. 8, line 52-53);
- receiving a confirmation of receipt of the software from the host ("**Installation results are gathered at region server**" col. 8, line 67); and
- recording an indication in the second database regarding the software downloaded to the host ("**updateable flag**" col. 8, line 50).

As per claim 25:

Hellerstein discloses the method as in claim 24 above; and further discloses:

- transmitting the host software file from the enhanced services system to the host ("**software distribution from RS 203 to target 202**" col. 8, line 52-53);  
and
- executing the host software in the host ("**installation on targets launched, post installation procedures and tests are done**" col. 8, line 65-66).

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As per claim 26:

Hellerstein discloses the method as in claim 24 above; and further discloses:

- transmitting an indication of certification of the host software file (**"This package is then transported to the region. Typical message content may include: service name, package name, "override" flag, package binary" col. 8, line 27-29; the software package itself can be considered an indication of certification or any of the message content can be an indication**); and
- verifying in the enhanced services system that the indication of certification has been received prior to transmitting a copy of the host software to the host (**It is inherent in order for RS 203 to perform verification on the environment of the machine 202**).

As per claim 27:

Hellerstein discloses the method as in claim 23 above; and further discloses:

- wherein the transmitting of the host software file from the host file database uses the Internet (**"the communication network may be public (e.g., Internet)" col. 11, line 58**).

As per claim 28:

Hellerstein discloses the method as in claim 27 above; and further discloses:



- wherein the host software file comprises at least one from the group of host protocol file, host profile file, host data file, and host configuration message set file ("**description file (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list)**") col. 7, line 60-62; **this file can be a host profile file).**

As per claim 29:

Hellerstein discloses the method as in claim 23 above; and further discloses:

- wherein the step of establishing a communications path between the host file database and the enhanced services system is determined in part based on a time indicated in the communication parameters ("**software updates should only occur between 11 PM and 6 AM. A software package is distributed to region servers if their region fits the distribution profiles**") col. 6, line 64-67).

As per claim 30:

Hellerstein discloses the method as in claim 23 above; and further discloses:

- wherein the host software file contains messages for interacting with a host associated with a specific host manufacturer and a model of the specific host manufacturer ("**message content may include: service name, package name, "override" flag, package binary**") col. 8, line 28-29).

As per claim 31:

Hellerstein discloses a method of downloading host software comprising:

- receiving a host software file associated with a specific host manufacturer and a model associated with the specific host manufacturer (**"obtain new package"** col. 9, line 8; **"introduce new software package (SP) and its description (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list) is entered in the Service Distribution Server or SDS 205"** col. 7, line 59-63);
- determining an enhanced services system to receive the host software file (**"determine all the region servers 203 whose service profiles match the service that is going to be provided by the new package"** col. 8, line 10-12);
- establishing a connection from the enhanced services system to a host file database (**"Software distribution from SDS 205 to region server 203"** col. 8, line 20-21, **a connection must be established using the destination address in order to distribute software**; also see FIG. 2); and
- transferring the host software from the host file database to the enhanced services system (**"Software distribution from SDS 205 to region server 203"** col. 8, line 20-21).

Hellerstein does not explicitly disclose:

- authenticating the enhanced services system to the host file database; and

- recording an indication of the date and time associated with the transferring of the host software to the enhanced services system.

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that when SDS 205 establishes a connection to the database in global software repository, it must perform a verifying step to make sure it connects to the right database. It also obvious to record date and time when transferred the software package for installation purposes. Therefore, one of ordinary skill in the art would have been motivated to perform authentication to protect database and record date and time of software package transmitted for the installation purposes since software package can only install at specific time (col. 6, line 64).

As per claim 32:

Hellerstein discloses the method as in claim 31 above; and further discloses:

- where the host software comprises a host protocol module file and a host profile file ("**description file (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list)**" col. 7, line 60-62; **this file can be a host profile file**).

As per claim 33:

Hellerstein discloses the method as in claim 31 above; and further discloses:

- wherein transferring the software uses a file transfer protocol over the Internet  
(**"Transmission Control Protocol (TCP)... TCP/IP version 2.3"** col. 6, line 13; **FTP uses the Internet's TCP/IP protocols to enable data transfer**).

As per claim 34:

Hellerstein discloses the method as in claim 31 above; and further discloses:

- wherein the step of determining an enhanced services system to receive the host software file further comprises the steps of:
  - o retrieving a file associating an enhanced services system with a plurality of host types (**"retrieval of target roles"** col. 8, line 44; **"a role repository 204 maintains information such as service, role, associated software package, and updateable flag"** col. 8, line 46-51), each host type comprising a specific host manufacturer identifier and a model identifier associated with the specific host manufacturer (**"each of the end point machines (the potential targets) has an appropriate amount of resources (CPU, RAM, disk space, swap space, etc.)"** col. 8, line 32-34, **each machine model has different amount of resources**); and
  - o determining if the host software file received matches one of the plurality of host types associated with the enhanced services system (**"determines if each of the end point machines (the potential**

**targets) has an appropriate amount of resources (CPU, RAM, disk space, swap space, etc.)" col. 8, line 32-34).**

As per claim 35:

Hellerstein discloses the method as in claim 31 above; and further discloses:

- wherein the host software file is tested for operation on a specific host manufacturer and host manufacturer's model **(It is inherent in Hellerstein's approach. The software package must be tested for operation on a specific target machine and model before it released).**

As per claim 36:

- recites the same limitations as recited in claim 24, and therefore, has been addressed in connection with the rejection set forth to claim 24.

As per claim 41:

Hellerstein discloses a method of loading software comprising:

- loading a host protocol file associated with a type of host **("a new software package (SP) and its description (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list is entered in the service distribution server" col. 7, line 59-62, description file includes host protocol file because it stores information about configuration settings, hardware drivers, software,...);**

- loading a host profile file associated with the type of host ("**description file**" col. 7, line 59, **description file also includes host profile file because it stores information about the functionality of the machine**);
- receiving a user input to determine the at least one service related parameter ("**administrator request software distribution**" FIG. 2; **administrator inputs request for software distribution**);
- using the protocol file and the at least one service related parameter to generate a host configuration message ("**message may include: service name, package name, override flag, package binary**" col. 8, line 28-29); and
- associating the host configuration message with the type of host ("**determine if each of the end point machine has an appropriate amount of resources (CPU, RAM, disk space, swap space, etc.). Determine if a target has an appropriate version of the (correct) operating system, pre-requisites (i.e., are the required services present)**" col. 8, line 32-38).

Hellerstein does not explicitly disclose:

- processing the host profile file to provide a user-interface for selecting at least one service related parameters associated with a service.

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Hellerstein's method to create an user-interface based on the description file. One of ordinary skill in the art would have been motivated to create a user interface based on the description file because it would allow

the user/administrator to select the services, resources, and version, the software package is required for specific target machine.

As per claim 42:

Hellerstein discloses the method as in claim 41 above; and further discloses:

- wherein the host configuration message is a statically created configuration message (**"SDS prepares a package , based on dependency requirements, that is suitable for target machines in that region. Typical message content may include: service name, package name, override flag, package binary"** col. 8, line 25-29, **this is statically created by SDS**).

As per claim 43:

Hellerstein discloses the method as in claim 41 above, but does not explicitly disclose:

- wherein the host configuration message is a dynamically created configuration message.

However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that the message is created by SDS 205 based on dependency requirements, that is suitable for target machine. It might be created statically or dynamically. One of ordinary skill in the art would have been motivated to create the message dynamically whenever it need one. This way, it does not waste space and memory.

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As per claim 44:

Hellerstein discloses the method as in claim 41 above; and further discloses:

- wherein the type of host is associated with a host manufacturer and a model of the host manufacturer (**each type target machine has different type of resources and is associated with a machine manufacture and each model has different type of resources for a specific target machine. This is why region performs determinations to find out which target machine matches with software package's description**).

As per claim 45:

Hellerstein discloses the method as in claim 41 above; and further discloses:

- wherein the host protocol file comprises a plurality of protocol messages associated with the type of host (**It is inherent because Hellerstein's system as plurality of target machines**).

As per claim 46:

Hellerstein discloses the method as in claim 41 above; and further discloses:

- wherein the host profile file contains a list of capabilities associated with the type of host ("**description (e.g., ... resource pre-requisite list,...)**" col. 7, line 61; "**resources (CPU, RAM, disk space, swap space, etc.)**" col. 8, line 33-34).



As per claim 47:

Hellerstein discloses the method as in claim 41 above; and further discloses:

- wherein storing the configuration message comprises storing the configuration message in a file in an enhanced services system (**the message must stored in a file before transmitted to region server**).

As per claim 48:

Hellerstein discloses the method as in claim 41 above; and further discloses:

- wherein the configuration message is an executable command on a processor in a host (**It is inherent in order to perform installation on the target machine**).

10. Claims 37-40 and 51-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hellerstein et al. (United States Patent No.: US 7,013,461 B2), in view of Weinmann (United States Patent No.: US 7,096,464 B1).

As per claim 37:

Hellerstein discloses a method for downloading software, comprising:

- communicating a software module associated with a brand and model of a consumer electronics host device to a host file database ("**introduce new software package (SP) and its description (e.g., service, role, software name, version, resource pre-requisite list, service pre-requisite list)** is

**entered in the service distribution server 205 and are stored in the global software repository 206"** col. 7, line 59-63);

- communicating a certification indication associated with the software module to the host file database, the host file database recording the certification indication in association with the software module (**the software package itself can be considered as a certification indication or its description can be considered as a certification indication**);
- communicating the software module from the database to an enhanced services system ("**software distribution from SDS 205 to region server 203**" col. 8, line 20-21), the enhanced services system comprising a server and database ("**role repository 204**" col. 8, line 45; also see FIG. 2), the server operatively connected to a distribution network ("**a communication network**" col. 11, line 56);
- detecting activation of a host, the host associated with the host manufacturer and further associated with a model of the host manufacturer ("**determine if each of the end point machines (the potential targets) has an appropriate amount of resources (CPU, RAM, disk space, swap space, etc.). Determine if the a target has an appropriate version of the (correct) operating system. Determine if the target has appropriate pre-requisites (i.e., are the required services present)**" col. 8, line 31-38), the host connected to the distribution network ("**a communication network**" col. 11, line 56); and

- transmitting the software module from the server to the host ("**software distribution from RS 203 to targets 202**" col. 8, line 52-53).

Hellerstein does not explicitly disclose the use of cable distribution network.

However, Weinmann discloses an analogous method that using cable network ("**a communication card or device 118 for exchanging data with a network 120 through a communications link 125 (e.g., a cable network)**" col. 3, line 24-28).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to use cable network in Hellerstein's system for transferring software package. One of ordinary skill in the art would have been motivated to use cable network in Hellerstein's system because the type of network is not critical to Hellerstein's invention. Any type of network would be acceptable in Hellerstein's system (see Hellerstein col. 11, line 60).

As per claim 38:

Hellerstein and Weinmann disclose the method as in claim 37 above; and  
Hellerstein further discloses:

- wherein detecting activation of a host is initiated by the receipt of a message from a host transmitted in a two-way cable network ("**may be connected to computer system 110 through network 120 and may exchange data, information and instructions with computer system 110**" col. 3, line 30-32, **this is two way communication**).

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As per claim 39:

Hellerstein and Weinmann disclose the method as in claim 37 above; and

Hellerstein further discloses:

- recording in an enhanced services server an indication associated with transmitting the software module from the server to the host ("**updateable flag**" col. 8, line 50).

As per claim 40:

Hellerstein and Weinmann disclose the method as in claim 37 above; and

Hellerstein further discloses:

- executing the software module on a processor in the host ("**installation on targets launched, post installation procedures and tests are done**" col. 8, line 65-66).

As per claim 51:

Hellerstein discloses the system as in claim 49 above, but does not explicitly disclose:

- a cable distribution network operatively connected to the enhanced services system capable of receiving the host software file from the enhanced services system.

However, Weinmann discloses an analogous system that includes:

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- a cable distribution network operatively connected to the enhanced services system capable of receiving the host software file from the enhanced services system ("**a communication card or device 118 for exchanging data with a network 120 through a communications link 125 (e.g., a cable network)**") col. 3, line 24-28).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to use cable network in Hellerstein's system for transferring software package. One of ordinary skill in the art would have been motivated to use cable network in Hellerstein's system because the type of network is not critical to Hellerstein's invention. Any type of network would be acceptable in Hellerstein's system (see Hellerstein col. 11, line 60).

As per claim 52:

Hellerstein discloses a system, comprising:

- an enhanced services system operatively connected to a communications network, capable of receiving and storing at least one host software file in a database ("**region server 203, role repository 204**" see FIG. 2), wherein the database stores at least one host address associated with the host software file ("role repository 204...determines whether targets have appropriate resources (either by querying them on demand or by maintaining a database with their configuration setting" col. 4, line 46-51).

Hellerstein does not explicitly disclose:

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- a cable distribution network, operatively connected to the enhanced services system capable of receiving the host file from the enhanced services system and transmitting the host software file to a host associated with the host address.

However, Weinmann discloses an analogous system that includes:

- a cable distribution network, operatively connected to the enhanced services system capable of receiving the host file from the enhanced services system and transmitting the host software file to a host associated with the host address (**"a communication card or device 118 for exchanging data with a network 120 through a communications link 125 (e.g., a cable network)"** col. 3, line 24-28).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to use cable network in Hellerstein's system for transferring software package. One of ordinary skill in the art would have been motivated to use cable network in Hellerstein's system because the type of network is not critical to Hellerstein's invention. Any type of network would be acceptable in Hellerstein's system (see Hellerstein col. 11, line 60).

As per claim 53:

Hellerstein and Weinmann disclose the system as in claim 52 above; and  
Hellerstein further discloses:

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- wherein the database further stores a host type associated with the host software file ("a database with their configuration settings" col. 4, line 50-51), the host type comprising a host manufacturer identifier and a model identifier of the host manufacturer (**the configuration file identifies what type (model) of target machine is required for the software package**).

As per claim 54:

Hellerstein and Weinmann disclose the system as in claim 52 above; and further disclose:

- a host connected to the cable distribution network ("**a communications link 125 (e.g., a cable network)**") see Weinmann col. 3, line 28), the host capable of receiving the host software file ("**software distribution from RS 203 to targets 202**" see Hellerstein col. 8, line 63-64; also see FIG. 2).

As per claim 55:

Hellerstein and Weinmann disclose the system as in claim 52 above; and Weinmann further discloses:

- wherein the cable distribution network supports two-way communication ("**may be connected to computer system 110 through network 120 and may exchange data, information and instructions with computer system 110**" col. 3, line 30-32, **this is two way communication**).

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As per claim 56:

Hellerstein and Weinmann disclose the system as in claim 52 above; and

Weinmann further discloses:

- wherein the cable distribution network is a one-way communication network  
**(It is inherent since one way communication is part of two way communication).**

As per claim 57:

Hellerstein and Weinmann disclose the system as in claim 52 above; and

Hellerstein further discloses:

- wherein the database further stores an indication of the host software file transmitted to the host ("**updateable flag**" col. 8, line 50).

As per claim 58:

Hellerstein discloses a system for distributing software to a host, comprising:

- means for communicating a host software file from a host software manufacturer to a host file database **(It is inherent in order for the SDS 205 to receive and distribute the software package)**, the host software file containing an indication of certification for operation in the host **(the software package itself can be an indication of certification or its description file can also be an indication for operation in the target machine);**



- means for communicating the host software file from the host file database to an enhanced services system ("**Service Distribution Server 205**" see FIG. 2), the enhanced service system comprising a server and database for storing the host software file ("**Region Server 203**" and "**Role Repository 204**" See FIG. 2);
- means for triggering the download of host software from the database to the host ("**Administrator requests software package distribution**" see FIG. 2); and
- means for communicating the host software file from the server to a host using a distribution network ("**Region Server 203**" see FIG. 2).

Hellerstein does not explicitly disclose the use of cable distribution network.

However, Weinmann discloses an analogous system that using "**a communication card or device 118 for exchanging data with a network 120 through a communications link 125 (e.g., a cable network)**" col. 3, line 24-28).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to use cable network in Hellerstein's system for transferring software package. One of ordinary skill in the art would have been motivated to use cable network in Hellerstein's system because the type of network is not critical to Hellerstein's invention. Any type of network would be acceptable in Hellerstein's system (see Hellerstein col. 11, line 60).

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Kimball et al. (United States Patent Application No.: US 2001/0013121 A1).
- b. LaJoie et al. (United States Patent No.: US 6,772,433 B1).
- c. Donlan et al. (United States Patent Application No.: US 2004/0088734 A1).
- d. Tam (United States Patent No.: 5,815,195).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip H. Nguyen whose telephone number is (571) 270-1070. The examiner can normally be reached on Monday - Thursday 10:00 AM - 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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